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DEFENSE SYSTEMS MANAGEMENT COLLEGE

PROGRAM MANAGEMENT COURSE

INDIVIDUAL STUDY PROGRAM

PROBLEMS IN THE ARMY ORGANIZATION
FOR INTEGRATED LOGISTICS SUPPORT

STUDY PROJECT REPORT

PMC 76-2

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LTC   US Army

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DEFENSE SYSTEMS MANAGEMENT COLLEGE

STUDY TITLE: PROBLEMS IN THE ARMY ORGANIZATION
                 FOR INTEGRATED LOGISTICS SUPPORT

STUDY PROJECT GOALS:

To foster an understanding of Army organizations providing
logistics support, and to evaluate their capability to detect
and act upon integrated logistics support problems associated
with fielded equipment.

STUDY REPORT ABSTRACT:

This report looks at Integrated Logistics Support (ILS) in the
field support environment rather than from the more common
viewpoint of the equipment development process.

The author draws upon the field experience of experienced missile
officers to describe how the ILS factors combine to create mat-
eriel readiness problems. Doctrine and organization are con-
sidered equally important problems affecting readiness and are
added to the list of ILS items.

Mission and Function Manuals from organizations in the whole-
sale support structure were studied to search ILS related tasks.
The resulting survey of these support organizations points out
that their functional orientation tends to block the complete
flow of logistics intelligence from the field.

An annex includes the selected function statements by organization
and provides a useful source for continuing studies.

Key Word Descriptors:

Integrated Logistics Support

Field Support Problems

Direct Logistics Support

NAME, RANK, SERVICE	CLASS	DATE
James C Schaaf Jr. MAJ US Army	PMC 76-2	8 Nov 76

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PROBLEMS IN THE ARMY ORGANIZATION
FOR INTEGRATED LOGISTICS SUPPORT

Study Project Report
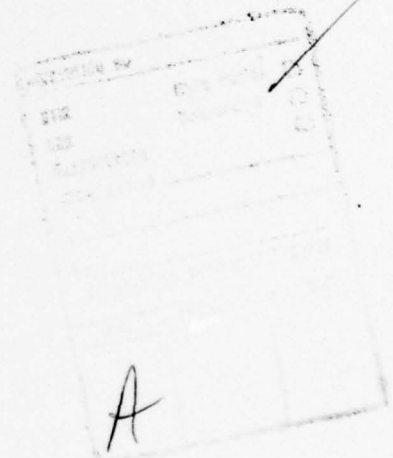Individual Study Program

Defense Systems Management College
Program Management Course
Class 76-2

by
James C. Schaaf Jr.
LTC   US Army
November 1976

Study Project Advisor
Mr Larry Birk

Executive Summary

During the development phase of the equipment life cycle, all aspects of the development are brought under the control of a single Project Office. This office spends considerable time, money and effort insuring that the fielded system will be supportable by applying the concept of Integrated Logistics Support (ILS). Upon fielding the system, the Project Office is terminated; and the system is supported by vertically structured functional organizations. This functionally oriented support removes, in effect, the "I" from ILS. Logistics problems are attacked in isolation, and may really be the unrecognized symptom of a problem in another area.

No matter how well a Project Office does its job, logistics problems will continue in the future. Many of them are caused by limitations in time during the development phase, and difficulty in predicting the reactions of new technology. The amount of testing must be balanced between costs of testing and the urgency of the IOC date. Unilateral changes in one logistic area (ie., training, organization, maintenance) can create problems in another area. All of the ILS areas are highly dependent and interactive upon each other. These are real problems, and some examples have been highlighted by assistance visits and field studies such as the Missile and Munitions Center and School's 1974/75 evaluation (MAME) of units in the field.

The current wholesale support structure supporting these systems is highly functionalized, divided primarily along three lines - materiel, training and organization, and personnel. Each has a strong impact on materiel readiness, but a weakness exists in the logistics intelligence reporting chain which tends to isolate the analysis of these problems rather than consider them together as a system. In addition, there is no clear cut assignment of responsi-

bility for solving these problems as a system.

As state-of-the-art technology increases, weapon systems become more complex and the interaction of the various ILS items increases. This requires all problem solving and corrective actions to be approached in a system context rather than individually. Actions are being considered now to improve the support structure's capability in this area. The author suggests forming a project office in each commodity Readiness Command, similar to a development project office, to provide integrated support to fielded systems. This office should have full authority to cut accross Command lines to draw together and task the functional support organizations. This would employ the matrix management concept and would effectively extend project management into the post-deployment phase of the equipment life cycle.

Whatever solution is adopted, logisticians must "think system" in order to make the most effective use of resources in improving materiel readiness in the field.

I wish to express my appreciation and thanks for the dedication and expertise of all those Department of the Army Civilians within the support structure who assisted me in identifying problem areas, and in obtaining reference material. The civilian work force is the backbone of our wholesale support structure and the Army's materiel readiness goals could not be achieved without them.

Jim Schaaf

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INTRODUCTION

The current system for the life cycle of equipment acquisition starts with the conceptual phase and ends with deployment. To intensify the management of this cycle, the Army has developed its program management concept which brings all aspects of the new item under the cognizance of a single manager. The most significant contribution of program management is the improvement in coordination and direction of effort gained by placing one office in charge of insuring that all aspects of the equipment are addressed during development. The Army continues to formalize and tune its program management concept to a fine art in order to insure that all areas are covered to make the final product meet the user's requirements. Shortly after fielding the new item, the program office is disbanded (unless new models or major changes are to be developed), and the system is then supported by the more traditional functional elements. Although the system can be effectively supported by these functional elements, the integrated effort is lost and the support may be less effective than it could be.

One of the key elements managed by the program manager during development is Integrated Logistics Support (ILS) which insures that the fielded item can be supported to meet readiness requirements of the user. The ILS items make up the "bottom of the iceberg" as shown in Figure 1, and the success or failure of research and development activity on these items is felt in the support phase, after the system has been fielded and the project office disbanded. The success of this ILS effort will determine the state of combat readiness of the system. If problems appear during the support phase, corrections must be made. However, management by the functional elements effectively removes the "I" from ILS.

This paper will examine the current functional management structure supporting combat readiness thru logistics

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INTEGRATED LOGISTICS SUPPORT (ILS)
THE BOTTOM OF THE ICEBERG

ACQUISITION
COSTS

RDTE

PURCHASE

SUPPLY

TRANSPORTATION
& HANDLING

OPERATION
& SUPPORT
COSTS

PERSONNEL & TRAINING

SUPPORT & TEST
EQUIPMENT

DOCTRINE &
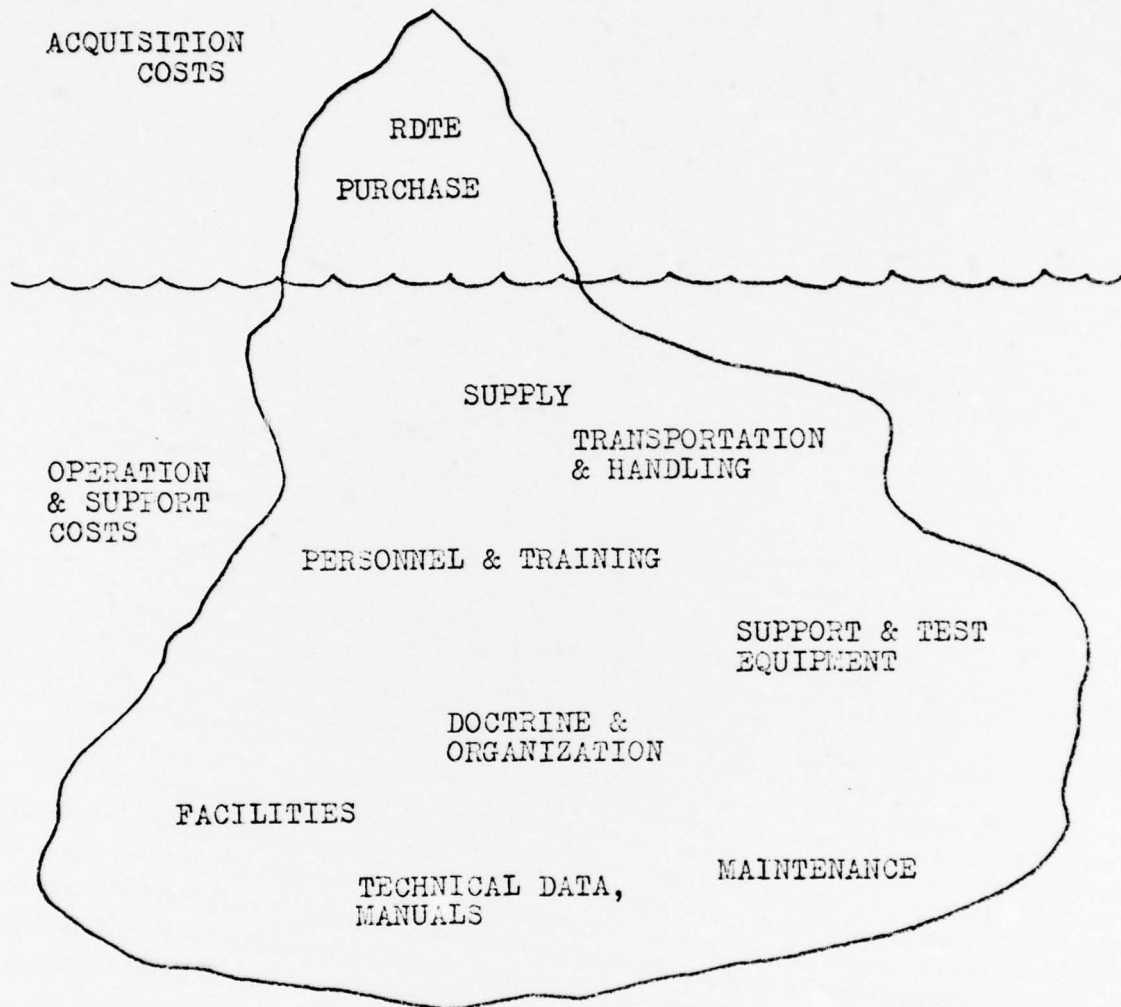ORGANIZATION

FACILITIES

TECHNICAL DATA,
MANUALS

MAINTENANCE

Figure 1

activities to see what ILS areas are covered and how they are coordinated in the post-deployment phase of the equipment life cycle. Finally, shortcomings in the functional system (as indicated by current ILS problems in the field) will be discussed with possible alternatives for improving support.

ILS PROBLEMS

The significance of post-deployment management cannot be appreciated without some discussion of ILS related problems which reduce combat readiness. Although technical hardware and supply problems most easily come to mind, we must be aware of other factors which can act alone or combine with equipment problems to reduce availability. We must continue to consider all the factors forming the "bottom of the iceberg" because logistics is not limited to the more familiar and visible hardware maintenance and supply problems. Some of the ILS items are fixed during the development phase and rarely present future problems (ie., transportability and facilities). However, other items change or develop problems after a few years in the field. These either could not be foreseen during the development, or were improperly developed or tested. These become highly significant for complex, integrated items such as missile systems. The most common problems that crop up as field experience is gained are listed in Table 1, and are discussed in the following paragraphs.

Maintenance - A great deal of effort is devoted to a systematic study of maintainability during the development of new systems. Much old equipment is still in the field that did not get this increased attention during its development, and newer equipment is still subject to problems in this area. Inadequate testing and analysis, wrong assumptions about state-of-the-art technology, or miscalculation of failure rates may change maintenance procedures and requirements after

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Table 1 - Post-deployment Problem Areas

1. Maintenance Concepts and Procedures
2. Supply Stockage and Selection
3. Support Equipment Needs
4. Publications Adequacy
5. Personnel Availability
6. Training Adequacy (Personnel Qualifications)
7. Organization (TOE)
8. Doctrine

the system has been in the field for a while (or many years). Correction of these problems usually requires an engineering effort similar to those conducted during the development phase. Major corrections, or incorporation of improvements or new capabilities results in Modification Work Orders (MWO) or a Product Improvement Program (PIP) which changes the system and may require extensive engineering development with impacts on supply and training.

Supply - Supply problems are closely related to the same factors contributing to future maintenance problems. Unforeseen maintenance problems, and wrong assumptions about failure rates during development are significant causes of supply problems. Other contributors are inadequate training of supply and maintenance personnel in the field, and inadequate test equipment. Changes in field practices not consistent with concepts envisioned during development also contribute.

Manuals and Test Equipment - Any changes in maintenance concepts require consideration of test and support equipment requirements as well as the updating of manuals. Extensive field experience may reveal defects in both areas which were not detected during development and operational testing. This can be caused by a change in quality of field versus test personnel, or changes in training concepts or content.

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The above four areas make up what many people consider as "logistics", centering around hardware and technology. These items are supported within the functional commodity command, and hence the user has one organization to contact for assistance or to channel suggestions. Coordination within the organization working on these problems is good because of the very visible effect of their interactions.- consider the case of a "throwaway" part which failed so far in excess of predictions that it was no longer economical to discard. Making it a repairable component requires consideration of the other items, changing the maintenance concept, requiring manuals to show the inner components and diagrams, requiring additions to the manuals, and the addition of new test equipment. However, these form only a part of integrated logistics support. Just as these items can be seen to interact upon each other, so do the next items to be discussed. Yet their interaction is often not so obvious and may even be quite subtle.

Training - Any changes in the technical areas discussed previously must be coordinated with the MOS producing school to insure that repairmen are capable. The training system must react to technical changes. Another problem is caused when the training system reacts to pressures for lower training costs and the acceptance of marginally trainable personnel. This results in reduced training time or the adoption of concepts not feasible in the field environment. In addition to deterioration of system readiness caused by marginally qualified technicians, they also directly contribute to unit personnel problems as better men are overloaded to compensate, and unit resources are devoted to on-the-job training. Maintenance and supply analysts must be aware of training problems to insure that failure data is properly interpreted. Hardware "problems" can be symptoms of training shortcomings rather than a deficiency in the hardware.

Personnel - Personnel shortages and qualifications have an obvious impact on system readiness. This is aggravated in complex systems which have a twenty-four hour mission where the shortage of one man can significantly overload a work section which also must include travel time. What is not so obvious are the personnel policies that contribute to these shortages, and increase the costs of recruiting and training. (A frequent comment from missile repairmen overseas is, "... join the infantry and get your holidays.")[24] Shortages develop when the particular maintenance field is percieved to be unattractive, causing re-enlistments to decline. Some contributing factors are pro-pay, duty hours, and assignment location and frequency. Lowering of entry standards not only increases the training burden, but effectively creates shortages by lowering the support unit's analytical capability in troubleshooting and fault isolation.

Doctrine and Organization - These areas are currently not generally recognized as ILS items, but are included in this paper as part of ILS since inadequate doctrine and/or unit organization can have adverse affects on materiel readiness equal to equipment and personnel deficiencies. Doctrine includes the concepts of support - how problems are reported, establishment of support unit relationships and hierarchies, and establishes relationships between wholesale and retail support. Organization involves the establishment of skills and equipment in the field, their location and their control. Inadequate organization design creates skill deficiencies which have the same effect as unfilled authorized positions. Both doctrine and organization can create cumbersome and misdirected activity lacking the necessary response or skills to react effectively, and can actually create additional materiel readiness problems. A current example in the missile field is the placement of direct support units under the command of the using unit. This has placed maintenance at

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a disadvantage since the operator is generally not interested in maintenance and is not trained in the proper utilization of maintenance resources. This has improved in those units which have elevated the maintenance unit to a command line on equal footing with battery commanders.

The preceding ILS items are vulnerable to change as extensive operational experience is gained on the fielded system. We can expect continued surfacing of problems in spite of the best efforts of the Project Office. As new systems approach state-of-the-art in technology, we must choose between excessive field testing with resultant late deployment dates, or fielding the system after reasonable testing and expect some changes to be required. These problem areas cannot be considered out of context with each other since they are interactive, and must be considered as a system. These problem areas are not theoretical, and real world examples can be found for all of them. The 1974/75 Missile and Munitions Evaluation (MAME) conducted by the Missile and Munitions Center and School for training feedback specifically identified 185 problems during visits[16] to overseas units with air defense and land combat missile systems. These problems had the following breakdown:

Equipment   35
Supply   13
Publications 18
Personnel   21
Training   35
Doctrine   23
Organization 31
Misc.   9

The MAME authors' recommendations included, "No single unilateral remedial action will solve today's problems, nor will a simplistic generalization suffice, ... nothing less than a well orchestrated response in consideration of all deficien-

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cies is required." The school has done an outstanding job in in highlighting problems in its latest MAME report. What should be of concern to the Army is the fact that these problems were surfaced by the concerted effort of the MAME team rather than by the current support sytem. Integrated Logistic Support must be a continuing effort that cannot be terminated with the Project Office.

ORGANIZATIONS

In order to study post-deployment management of integrated logistics support, and learn more about the total support structure; Organization and Function Manuals were collected from eleven Army agencies and searched for tasks related to the support of fielded systems. The study was limited to Army elements, hence DSA and GSA are not included. A further restriction was made by focusing on the missile commodity area, which selects MICOM and MMCS as the commodity command and school to be included in the organization list. Pertinent tasks found in the Organization and Function Manuals were extracted and condensed in the annexes at the end of the paper. The organizational structure and relationships are shown on the chart of Figure 2. The following paragraphs briefly describe each organization and a condensed summary of their functions is illustrated in the matrix in Table 2.

DARCOM - The new DARCOM organization has been tailored to improve and emphasize fielded system readiness by splitting the R&D and Support functions into two major elements. The Deputy Commanding General for Materiel Readiness will exercise command over logistics centers and certain project managers and agencies. He will establish materiel readiness objectives and appraise performance. DARCOM Headquarters is emphasizing the "Corporate Headquarters" image of control and planning, and will rely on its subordinate commands for action. The commodity commands under DARCOM are being split

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into two separate commands to separate the R&D and Support functions too. For example, MICOM is in the process of splitting into the Missile Research and Development Command (MIRADCOM), and the Missile Readiness Command (MIRCOM) which creates a logistics center to insure the readiness of materiel in the user's hands. DARCOM's primary emphasis in the ILS arena is on the traditional technical items. It is also involved in doctrine for wholesale support. Although it has a training function; it has not been entered in Table 2 since this function is oriented toward New Equipment Training (NET) in the development phase, or training members of the wholesale support system rather than the MOS's dealing directly with the fielded system. DARCOM controls Logistic Assistance Offices (LAO) which function as points of contact for the user and expedite the flow of information between the field and DARCOM.

MICOM - Although the Missile Command has not completed its reorganization, plans and the letter of instruction for the reorganization permit a description of the logistic element (MIRCOM) now. MIRCOM will be a logistic center providing follow-on procurement and support to fielded systems. It will also control project offices which have systems in the advanced stages of development or production. It will retain some existing MICOM Directorates intact. These are: the Systems Management Office (SMO), the Maintenance Directorate, and the Directorate for Materiel Management. The SMO will assume the management of a system after its project office has been terminated. It in effect becomes the project office for all systems which have been "deprojectized"; and functions as a project office in a matrix organization, tasking the other Directorates for support as required. The SMO currently has an authorized strength of 50. About half of its personnel are devoted to the NIKE HERCULES system, and the other half are split between eight other systems which no longer have a

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project office. The Maintenance and Materiel Directorates are designed to provide technical support on hardware and supply problems affecting materiel readiness. The maintenance Directorate also controls the Missile Maintenance Technicians (MMT) who are field technicians located within the LAO, but who report to MIRCOM. These people are a valuable source of information from the field, and provide direct technical assistance on-site to the user.

TRADOC - The primary missions of the Training and Doctrine Command are to develop and manage training programs, and to supervise the training of individuals; and guide, coordinate and integrate the total combat development effort of the Army. It has two primary subordinate commands of interest for studying ILS - its schools (The Missile and Munitions Center and School is singled out due to the commodity of interest), and the Logistics Center. Training is fully recognized as a part of ILS, but combat developments (in this case, logistics support doctrine and concepts) is not widely recognized or accepted as a valid topic for integrated logistics support.

LOG CENTER - The Logistics Center is a subordinate TRADOC unit with missions of developing retail logistics concepts, doctrines, organizations, and assuring that approved concepts are incorporated in service school programs of instruction. It also serves as a principle advisor to DA, TRADOC and DARCOM on logistics matters and the career development of logistics personnel. It can task other organizations for efforts requiring specialized expertise such as MMCS for matters concerning missile and munitions logistics. The Logistics Center also has a strong impact on the content of TOE and MOS's, including the design of new support units and MOS's.

MMCS - The Missile and Munitions Center and School's primary mission is to develop and present training to produce qualified support personnel for the field. As a center, it also works in the areas of doctrine, organizations, and MOS devel-

opment. Its efforts in obtaining feedback on training effect-
iveness provides a valuable communications link with the
field since feedback often contains information on problems
in other areas besides training adequacy. The missile field
has a significant communications advantage due to the co-
location of the school with the research and logistics cen-
ters of MIRADCOM and MIRCOM. This facilitates dialog and
coordination on missile problems, and also provides a solid
base of experience and expertise when the long term experi-
ence of civilians in the technical areas is combined with
the recent hands-on-equipment field experience of military
personnel in the school. Adding the Logistics Center to this
combination forms a triad which together is capable of cor-
rectly identifying and assessing any field problem in deploy-
ed missile systems.

DA DCSPER - The Deputy Chief of Staff for Personnel is the DA
staff agency with responsibility for manpower allocation,
budgeting and training. These activities are performed in
detail by one of its field agencies, The Military Personnel
Center.

MILPERCEN - The Military Personnel Center is a field operat-
ing agency of DCSPER with the mission of executing and re-
commending military personnel policies, systems and programs.
It developes and supervises military personnel management
procedures, and its actions directly affect materiel readiness
thru the availability of operating and support skills in the
field. MILPERCEN makes the actual personnel assignments to
major commands (MACOM's) and determines training quotas for
the schools.

DA DCSOPS - The Deputy Chief of Staff for Operations's role
in the ILS of fielded systems involves the development of
force requirements for combat service support units, and the
development and approval of Tables of Organization and Equip-

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ment. It also validates the personnel authorizations in MOS and grade detail.

DA DCSLOG - The Deputy Chief of Staff for Logistics has overall responsibility for the management of logistical activities, and is responsible for the support of materiel systems from production output thru disposal. The DCSLOG range of activities covers logistics concepts and doctrines, equipment allowances for TOE's, quality and mix of support units, maintenance and supply policies, and unit materiel readiness. DCSLOG also controls the tasking of the Logistics Evaluation Agency (LEA) and sponsors Command Logistic Review Team Expanded (CLRTX) visits to assist MACOM's and find problem areas requiring DA attention.

LEA - The Logistics Evaluation Agency is an organization under the control of DCSLOG with the mission of assisting DCSLOG in the execution of staff responsibilities, thru review and validation of logistic analysis. It provides additional resources for studying problem areas, and also assists in maintaining surveillance over the logistic organization and system Army-wide to insure logistic readiness.

FORSCOM - The Forces Command is the only user to appear on the organization chart of units affecting the support of fielded systems. For this paper, the retail system below this level is not shown, and the FORSCOM functions will also represent those of other MACOM's (EUCOM, PACOM etc.). Its primary mission is to organize, station, equip, and train assigned units to insure their readiness for assigned missions. A major command such as this will usually have the first crack at a readiness problem, determining if it is a local problem involving allocation of resources, span of control, or individual training or personnel deficiencies versus major problems beyond the major command's control.

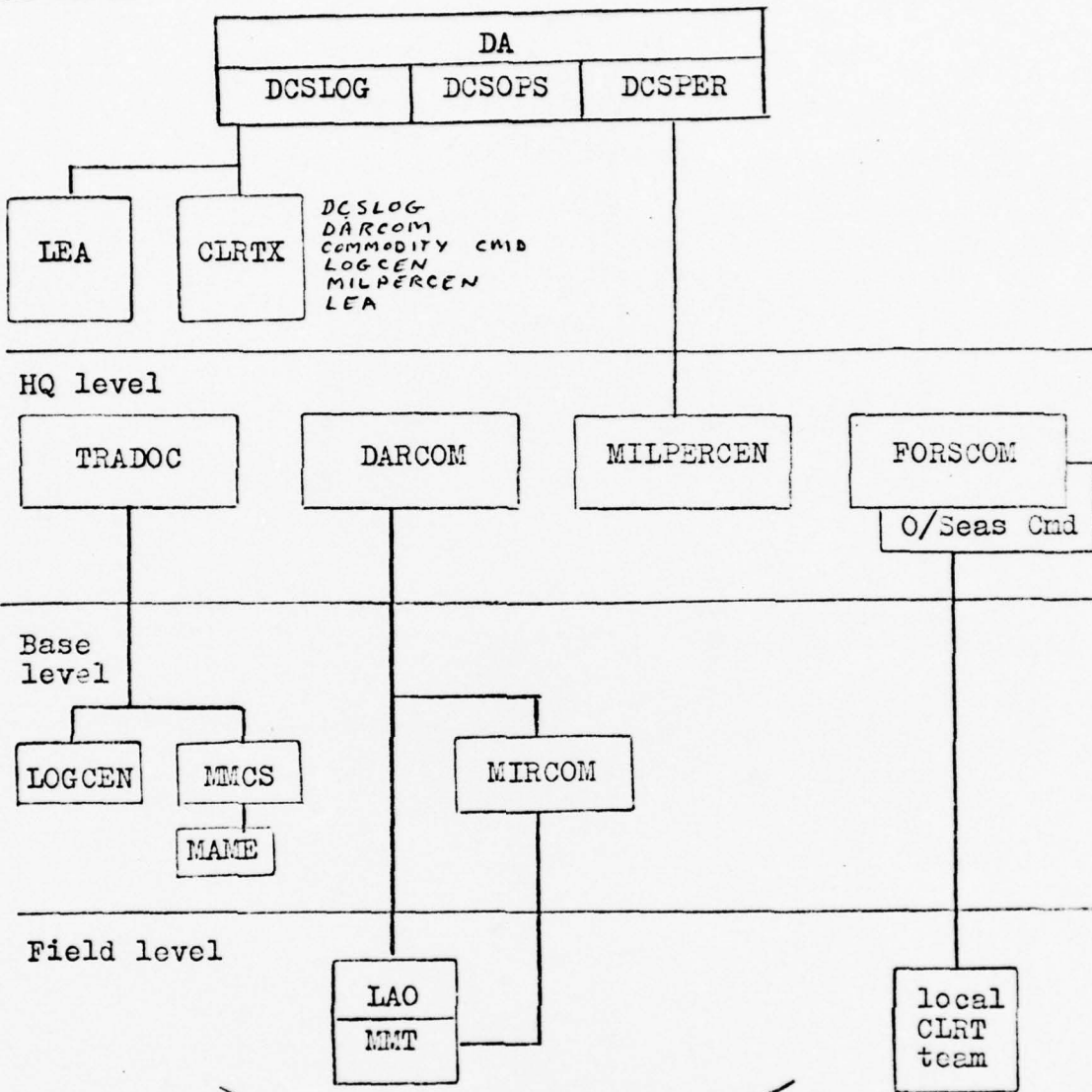The organization chart at Figure 2 attempts to show

the relationships of these organizations and the information flow between them in a single picture. Analysis of the organization descriptions, task matrix (Table 2) and function extracts in the annexes indicates that all ILS problem areas are covered; however, they are organized along functional lines and there is a weakness in integrating them. Two elements contributing to this weakness are information flow and coordination of action thru positive control measures.

Although function statements indicate that all areas are adequately covered, we must remember that organizations do not always operate as written - some tasks may have been inserted by energetic, far sighted, and ambitious individuals; and then overlooked in the review process, ignored in actual practice, or (most commonly) interpreted within a narrower scope of view than intended. Some tasks read well, but the organization may be a slow cumbersome dinosaur in carrying them out. The support systems have good, dedicated people in them, and criticism of the information flow is not intended to be a criticism of these people. We all tend to narrow our thinking and perspectives into our specialty field and job description. Some individuals do, as a matter of routine, recognize and refer problems not in their area of responsibility. Other barriers also exist - one ex-MIT commented that he had his "toes stepped on" by the local MACOM for commenting on a personnel problem thru channels. Another problem directly associated with functional organizations is the assignment of priorities and acceptance of the fact that a real problem exists. A critical problem for one functional area may be a minor harassment for another, and needed action suffers thru lack of a controlled and coordinated response.

The findings of the MAME team indicate that the current system's information flow is not functioning as well as it should, and the fact that many of the problems were noted on previous MAME reports indicates that corrective response is

LOGISTICS ORGANIZATIONS

DA level

```
                    ┌──────────────────────────────────┐
                    │               DA                 │
                    ├──────────┬──────────┬────────────┤
                    │  DCSLOG  │  DCSOPS  │   DCSPER    │
                    └──────────┴──────────┴────────────┘

        ┌────────┐   ┌────────┐    DCSLOG
        │  LEA   │   │ CLRTX  │    DARCOM
        │        │   │        │    COMMODITY CMD
        └────────┘   └────────┘    LOGCEN
                                   MILPERCEN
                                   LEA
```

HQ level

```
    ┌────────┐    ┌────────┐    ┌───────────┐    ┌──────────┐
    │ TRADOC │    │ DARCOM │    │ MILPERCEN │    │ FORSCOM  │
    │        │    │        │    │           │    │          │
    └────────┘    └────────┘    └───────────┘    ├──────────┤
                                                 │ O/Seas Cmd│
                                                 └──────────┘
```

Base level

```
    ┌────────┐ ┌────────┐         ┌────────┐
    │ LOGCEN │ │  MMCS  │         │ MIRCOM │
    │        │ │        │         │        │
    └────────┘ └────────┘         └────────┘
                 │ MAME │
                 └──────┘
```

Field level

```
              ┌────────┐                    ┌────────┐
              │  LAO   │                    │ local  │
              ├────────┤                    │ CLRT   │
              │  MMT   │                    │ team   │
              └────────┘                    └────────┘
```

Personnel   SYSTEM   Maintenance
Training   READINESS   Supply
Organization   Spt Equip
                                          Manuals

Figure 2

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Table 2 - Functions Matrix

This table tabulates functional activity in the different ILS areas for quick comparison. It cannot be exact since some broad interpretations had to be made to fit definitions and key function statements.

Org \ ILS Area	DARCOM	MIRCOM	TRADOC	LOGCEN	MMCS	DCSPER	MILPERCEN	DCSOPS	DCSLOG	LEA	FORSCOM
Maintenance Concept/Proc	IA	IA	C						A		
Item Mod/Improvement	IA	IA		C				C			
Spt Equip	IA	IA			C						
Supply	IA	X	A	CA							
Manuals	X	IA									
Personnel		C	C	C	C	A	X	C			
Training				IC	X	C	CA				
TOE		C	A	CA	CA			CA	CA		C
Doctrine, Concepts, Sys	X	CA	A	X	CA				A	IC	
Readiness	X	X	IA	C		A	IA		X	IC	IA
Field Assist	X	X	C							A	

I Information collection

C Coordination/evaluation

A Action

X All of the above

weak also. Only one other element on the organization chart provides the same deliberate grouping of expertise in search of problems similar to the MAME team; and that is the CLRTX, a temporary grouping of people for the duration of the visit. Of special significance is the follow-up by DCSLOG on DA level problems exposed by CLRTX. This high level follow-up appears to be lacking in the current system when a surfaced problem spans several functional areas.

PROBLEMS AND ALTERNATIVES

This paper has looked at only the organizations which act upon integrated logistics support, and therefore cannot provide a detailed analysis of shortcomings of the current system. Comments will be limited to the previously noted information and control problems. Additional study is required to thoroughly analyze the system. During the research for reference materiel on this paper, a seemingly unending chain of related reports and programs was surfaced, and the paper had to be limited to the organizational aspects because of the time available. Reports and programs are equally important parts of the support system, and need to be addressed in any future studies aimed at improving the current system.

A basic factor in the information flow problem lies in peoples attitudes and perspectives. We could make an immediate improvement if we emphasized "think system" when working in our respective specialty areas. No amount of reorganization or changing of procedures will be as effective as an individual with a broad background in various aspects of ILS who seeks out information and passes it on to someone who is capable of taking corrective action. The lack of response can be caused by many things – simply not getting the problem to the right level or person is one, and plain lack of follow-up is another. Parochial attitudes form another barrier (when an outsider points out a problem in your area, he may be saying you haven't done your job). The basic problem may be

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vertical, bureaucratic attitudes that lock us into our own organization. Emphasis on the matrix management concept (used by most Project Offices) of horizontal communication and action might do the most to improve follow-up actions short of a complete realignment of responsibilities. Another barrier comes from the user who may feel that the LAO is here to support - not rock the boat. A parochial attitude is experienced sometimes when the LAO or MMT attempts to surface problems not directly identified within his technical expertise (ie., personnel and organizational relationships); yet the LAO is probably in the best position, of all people exposed to the problem, to provide an unbiased assessment of the situation. This places a premium on the personality traits of the LAO and MMT, to aggressively surface problems in such a way as to be continuously regarded as a supporter, rather than a "spy" for DARCOM and DA.

To adequately detect and analyze symptoms to find the "real" problem, and provide a responsive and effective <u>system</u> correction, analysis of support system inprovements should look for the following features:

  1. An information system for detection of trends in all areas.

  2. An ability to separate symptoms from the real problem.

  3. Effective communication to an action agency.

  4. Responsive action.

  5. Control to insure an integrated response.

The current support system (Figure 3), unaugmented by special teams such as MAME and CLRTX, tends to keep its information flow restricted to its own technical area; with resultant difficult communication to an action agency. Control or follow-up on response appears to depend more upon the personality of the individual reporting the problem rather than a formalized organizational requirement to make something hap-

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pen.   The dotted lines in Figure 3 show the possible paths
(assuming a problem is recognized in a nontechnical area)
that information flow can take.   Information along the hori-
zontal paths at the mid level does not insure that action
will be forthcoming.   Flow up thru DARCOM may cause that
level to become involved in details that it wants to stay within
MIRCOM for action and does not now have adequate manpower
with which to respond.

Figure 3 - Current System
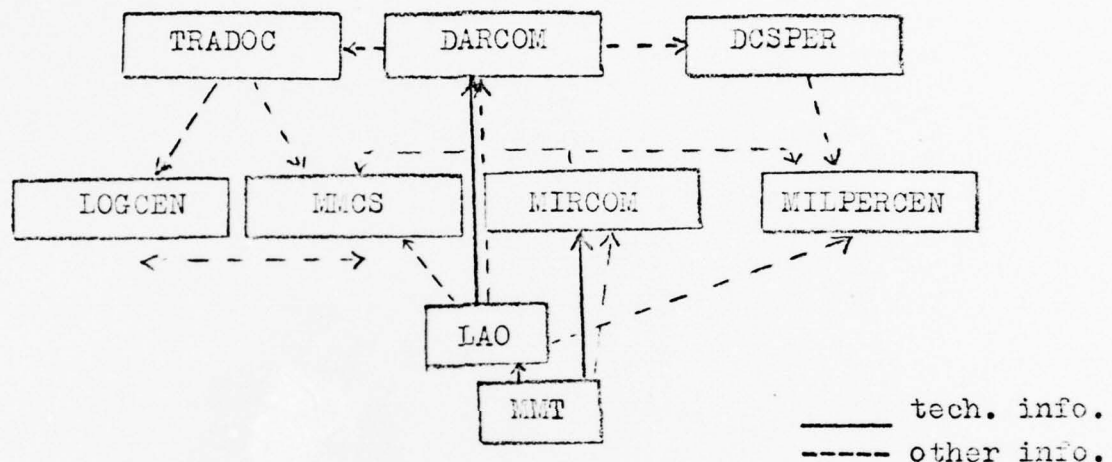
A major objective within DCSLOG is the development of
a responsive, integrated and closed loop logistic system bet-
ween DA, DARCOM, TRADOC and the user.   To this end a concept
study has been chaired by DCSLOG to identify means to improve
support in information channels to advertise, broadcast, and
feedback logistic matters and intelligence; and to obtain
more coordination with MILPERCEN and TRADOC concerning per-
sonnel and training doctrines impacting logistical support.
DARCOM's input (as understood by this author) would place
representatives from TRADOC and MILPERCEN with the MMT to
strengthen both the intelligence channel and support to the
user.   The DARCOM proposal recognizes that "currently there

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is no adequate mechanism to collect, correlate and dissemin-
ate logistic intelligence ... no single activity charged
with insuring response to these problems ...". DARCOM
advocates ignoring the current problems since numerous
people are working on them now, and place efforts on provid-
ing an implementation plan to identify and attack further
problems. This refreshing approach will quicky field an
improved support system which has room to evolve in the
future. Figure 4 below indicates the DARCOM proposal as it
exists in its October 76 draft stage.

Figure 4 - DARCOM Draft
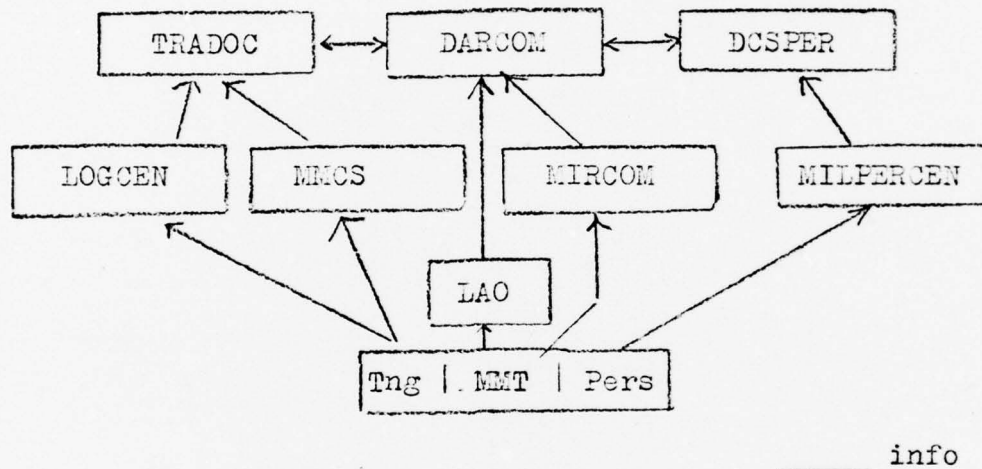
_____ info

The problem identification function has been strongly re-
inforced with resultant improvement in the potential for
action since a command representative is presenting the
problem.

This author feels that the above system is still weak
in controlling the response and proposes an alternative which
adds a control element to the improved information flow by
expanding the responsibilities and authority of the SMO under
MIRCOM. Under this concept, the SMO office would be fully
chartered similar to a development Project Office, but would
manage the logistic problems of a group of commodity systems

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rather than the development problems of one system. It would
have tasking authority under the matrix management concept.
("negotiation" might be a more appropriate word than "tasking")
Figure 5 illustrates this concept.

Figure 5 - Author's Addition
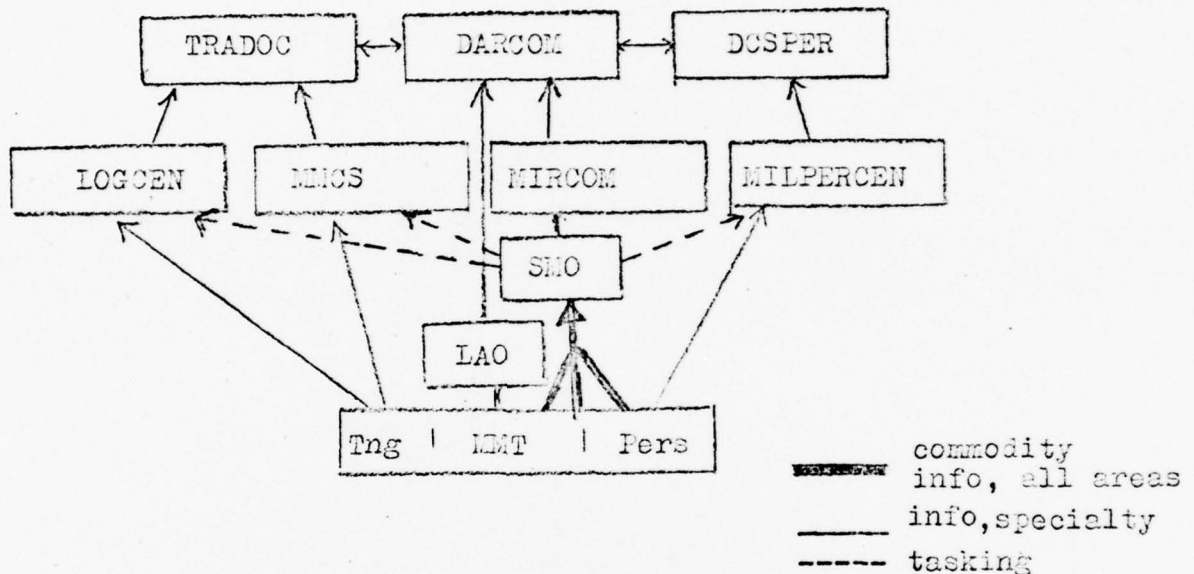
Another alternative would be to continue the use of
special teams such as MAME and CIRTX under the control of
a general logistic element like LEA. This has some advan-
tages of being able to tailor the information base to meet
specific requirements and exposes more staff officers to the
current field environment.

The main objective of any changes should be to keep
visibility of weapons systems as a system. The increasing
complexity of today's weapons makes them more vulnerable to
the potential problems lurking within the ILS areas, and makes
these areas more dependent and interactive upon each other.
Only by insuring that all of our corrective actions "think
system", will we be able to insure maximum readiness.

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5. Forces Command Regulation 10-5, 20 Feb 76
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9. Missile Command Draft Regulation 10-2, effective Jan 77
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11. Training and Doctrine Command Regulation 10-5, 1 Feb 75

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19. AR 10-42, Forces Command, Apr 75
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21. AR 700-127, Integrated Logistics Support, Apr 75
22. AR 702-3, Reliability, Availability and Maintainability, Mar 73

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23. Interviews with various members of MICOM, DARCOM, LOGCEN, MILPERCEN, and DCSLOG concerning actual missions and functions. Aug 76 – Nov 76.

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25. Pre-trip briefing for CLRTX-Korea at DCSLOG, 28 Sep 76.

ANNEXES

Extracts from Organization and Function
Manuals

The following annexes contain selected and condensed
extracts from various Command Organization and Function
Manuals. Only those items which relate to integrated log-
istic support of fielded systems were selected for study.

Annex	Command
A	DARCOM
B	MICOM
C	TRADOC
D	LOGISTICS CENTER
E	MISSILE & MUNITIONS CENTER & SCHOOL
F	DCSPER
G	MILPERCEN
H	DCSOPS
I	DCSLOG
J	LOGISTICS EVALUATION AGENCY
K	FORSCOM

Annex A   Selected DARCOM Mission and Function Statements

DARCOM:

1. Determine DARCOM materiel readiness mission objectives and evaluate functional performance against these objectives ...

2. Act as primary DARCOM interface with the Army-in-the-Field for determining the user's overall support requirements, and assuring that DARCOM materiel readiness programs and wholesale logistics system operation are constant with known requirements and user doctrine.

Directorate for Plans, Doctrine and Systems:

1. Reviews new or improved DOD/DA logistics support concepts for introduction into the Army Logistic System, coordinate DARCOM response and develop logistic support doctrine for inclusion in DA logistics field manuals, and in TRADOC/DARCOM schools curricula.

2. Develops new or improved DA logistics publications media, in coordination with HQ DA staff agencies and HQ TRADOC, to produce logistics field manuals ...

3. Maintains liaison with HQ DA, MACOM's ... to keep abreast of the logistics systems in being, or under development, that will impact or interface with the Army Wholesale Logistic System.

4. Maintains awareness of DARCOM/TRADOC/FORSCOM relationships in the area of logistics concepts and doctrine with emphasis on compatibility of interface between wholesale and Army-in-the-Field/installation logistics.

5. Reviews combat development and logistics studies to determine impact on ... current logistics doctrine ... prepares Command response.

6. Develop new or improved logistic systems (supply, maintenance, transportation, services and facilities) ...

7. Coordinates the initiation, development and implementation of new/evolving logistics systems ...

8. Validate the requirements for new or improved logistics systems.

Annex A, DARCOM continued.

Directorate for Materiel Management:

1. ... materiel requirements determination for acquisition, overhaul, retention, replacement and disposal.

2. Manage the Army Direct Support System (DSS).

3. Establish policies, plans, and objectives for the management and distribution of major and secondary items and repair parts.

4. Establishes requirements for, and coordinates in the development of new and revised supply and distribution systems.

5. Establish policy and provide guidance for ... uniform system for collecting equipment and maintenance performance data ... criteria for equipment serviceability and economic repair standards ... conduct of maintenance training.

6. Establish policy and provide guidance and direction for maintenance ... concepts and procedures, operations ... at various levels of maintenance ...

7. Exercise technical direction over NMP's and maintenance engineering at MMC's.

8. Participates in development of Army logistic readiness standards.

Directorate for Readiness:

1. Evaluate Army Materiel Readiness.

2. ... identify deficiencies which contribute to qualitative and quantitative shortfalls in readiness; to highlight major supply and maintenance shortfalls which reduce or degrade readiness, provide intensive management to logistic problem areas until Army readiness goals are satisfied.

3. Assure product improvement of fielded weapon systems and equipment.

4. Operate a logistic assistance program responsive to the requirements of the using Command and DARCOM. Assure awareness of customer problems ...

Annex A, DARCOM continued.

5. Operate a Logistic/System Assessment Program (Red Team) for the periodic and systematic review of specified weapon systems and equipment.

6. Exercise operating control over the MMC and worldwide network of Logistic Assistance Offices.

7. Establish policy and provide guidance and direction for ... determining Army logistic readiness conditions and trends ... analysis of unit readiness and logistic improvement reports to identify both equipment and repair parts shortages and other problems degrading logistics readiness ... and initiating corrective action.

8. Represent DARCOM in worldwide DA logistic materiel readiness assistance visits and in MACOM Logistic Review Team Visits.

9. Exercise technical direction over DARCOM customer assistance field activities.

10. Plans and executes liaison activities with appropriate headquarters and worldwide organizations to maintain awareness of customer problems and support requirements.

11. Monitors periodic reports submitted by DARCOM customer assistance offices, depots, and commodity/logistics commands to insure adequate coverage of field problems...

12. Assesses and evaluates the effectiveness of the DARCOM customer assistance program from a customer and DARCOM point of view ...

13. Provide the information base to revise maintenance concepts, including level of repair, to achieve optimum operational levels.

14. Assess logistic support requirements throughout the life cycle.

15. Assume systematic improvement of DARCOM materiel in the field.

16. Establish policy and provides guidance for:

    a. ... in-depth assessment (Red Team) of major weapons systems to ascertain that field performance and logistic support meets applicable requirements.

Annex A, DARCOM continued.

      b. DARCOM Equipment Improvement Recommendation (EIR) procedures which are responsive to user needs.

      c. Provide requirements for initiation of product improvement proposals (PIP's) on fielded equipment.

17. Manages the Modification Work Order (MWO) program for fielded materiel.

Annex B   Selected MICOM Mission and Function Statements

<u>Systems Management Office</u>:

1. Manage command effort on assigned systems, providing continuing control and coordination to assure full support by all concerned organizations during ... support phase of the acquisition/support process.

2. Insure integrated management of all activities involved in providing and supporting systems/equipment to using units.

3. Perform studies for the purpose of improving operation and management of assigned systems.

4. Develop positive methods for evaluating impacts of proposed changes ...

5. Plan, direct, evaluate, coordinate and assure ... logistic ... efforts of assigned systems ... to accomplish stated objectives ...

6. Maintain continual cognizance of efforts in defining system design/performance problems ...

7. Provide guidance and direction for the preparation of Product Improvement Programs ...

8. Coordinate changes to system/subsystem/component development plans with user agencies ...

9. Maintain cognizance of contractor and other government agencies' activities to remedy technical problems.

10. Integrate all resource requirements into a total program requirement to support the weapon/equipment ...

11. Provide liaison and coordination with other DARCOM elements, overseas command, ... CONUS elements relative to supply management for assigned systems.

12. Review and approve equipment distribution planning ... and deployment of materiel ... to assure support.

13. Provide overall management guidance and approval for maintenance support planning, new equipment training, and provisioning of repair parts, tools and test equipment, and modification methods.

B-1

14. Provide overall direction and approval for Maintenance Assistance Requirements.

15. Provide overall management direction for maintenance and inspection standards, authorization and allowance documents, ammunition and explosives reports and support, and investigation of malfunctions, accidents or incidents associated with the assigned system.

16. Provide management direction and approval of technical assistance programs for assigned systems.

17. ... guidance and approval for technical publications and maintenance specifications.

18. ... management direction for conducting system maintenance evaluations.

19. Assist in the development of improved concepts of tactical emplyment consistent with system improvement and greater effectiveness of missile systems.

20. Resolve on-site technical or administrative problems relating to supply, maintenance and application of approved modifications.

21. Evaluate reported field deficiencies and expedite flow of information ...

Maintenance Directorate:

1. Direct and accomplish maintenance management, including maintenance engineering, system engineering, development of equipment publications, and maintenance support planning for all assigned systems.

2. Plan and development maintenance policy, establish maintenance criteria, and prescribe ... maintenance procedures, repair parts, tools and test equipment.

3. Provide ... an assessment of ILS effectiveness...

4. Coordinate with DA agencies and elements within DARCOM to assure that support plans are based on proper concepts which ... will fulfill the user's requirements.

5. Participate in activities which affect all elements of logistics and initiate appropriate actions to enhance

Annex B, MICOM continued.

maintenance support.

6. Evaluate weapon systems and define technical requirements for special tools, common tools, tool sets, special and common test equipment ...

7. Determine maintenance factors for ... fielded systems.

8. Compute maintenance task distribution, and turn-around time. Determine replacement rate for all selected repair parts.

9. Provide technical input and/or dynamic review to assure technical accuracy and adequacy of equipment publications.

10. Provide assistance and technical guidance to user personnel and personnel of other supporting organizations. Provide personnel for short term special maintenance assistance on a worldwide basis.

11. Develop technical data to support establishment of, or revision to Military Occupational Specialties and Tables of Organization and Equipment.

12. Monitor performance of materiel throughout its service life; analyze failure and demand data to determine trends, develop and recommend corrective measures.

13. Analyze Equipment Improvement Recommendations (EIR's), prepare answers to the field, investigate and correct deficiencies when within maintenance engineering capability, prepare Product Improvement Reports on design and quality problems and follow-through to closeout.

14. Analyze Technical Evaluation Reports submitted by the field ...

15. Review proposed Engineering Change Proposals ...

16. Prepare analysis of Materiel Readiness and monitor weapon system operational readiness trends.

17. Coordinate with, and provide technical information to DA agencies, field logistical activities, contractors, depots, schools, and service organizations ...

18. Develop calibration requirements, methods and techniques ...

Annex B, MICOM continued.

19. Plan, direct and control the preparation and publication of DA and DARCOM equipment publications ...

20. Maintain coordination with Theaters. LAO's, and SSTR's to assure optimum support of Command managed materiel ...

21. Plan, direct and coordinate Field Services Activity matters which provide worldwide technical assistance to Major Commanders...

22. Provide staff supervision, advice, assistance, and coordination ... in all aspects of training for ... modified equipment.

23. Monitor effectiveness of operation of Command equipment in the field through direct observation, records and reports.

24. Serve as point of contact ... to gather logistic data, on a one time basis, for resolution of specific problems.

25. Perform and/or manage systems engineering and configuration management for SMO systems, perform product engineering logistic support analysis ...

26. Direct preparation of feasibility studies, system simulation, trade-off studies, design studies, cost/effectiveness, and other studies ...

27. Coordinate system performance with user agencies to insure that system aspects and capabilities are in consonance with user requirements when requested by SMO.

28. Prepare, coordinate and consolidate engineering and related reports on the weapon system.

29. Analyze to evaluate data from the Sample Data Collection Program ...

30. Originate, implement, monitor and control all Sample Data Collection Programs pertaining to Command managed systems.

31. Accumulate and process all field data from TAMMS and provide the necessary information for decisions as relates to maintenance management.

32. Research, analyze, compile, and publish special maintenance data summaries ...

33. Implement procedures to insure continuing and timely action on maintenance engineering studies relative to Materiel Readiness ...

34. Serve as principle contact point with Logistics Data Center (LDC) in matters involving maintenance data management.

35. Establish, maintain and furnish information to LDC in accordance with TM 38-750-2. Receive, analyze, and furnish ... summary reports ...

Directorate for Materiel Management:

1. Manage the Command Materiel Readiness Program and insure timely support ... and supply technical assistance to field customers.

2. Collect and evaluate data bearing on logistical mission performance ... advise management of significant trends, actual or potential deficiencies; analyze NICP performance ...

3. Develop methodology, assumptions, cost estimating relationships, and prepare logistic support cost required in economic analysis of product improvement proposals ...

4. ... perform independent investigations of problems/potential problems involving total logistics support for missile materiel ...

5. Maintain "Birth to Death" cognizance of plans, programs and schedules of missile systems ...

6. Identify incipient logistics readiness problems or inconsistencies ... and take appropriate action ...

7. ... assure that responsible organizations apply overall quality, reliability, maintainability, integrated logistics support, and maintenance engineering considerations in support of missile systems.

8. Explore, develop, and recommend new or revised logistics support concepts and plans to better adapt operations to the peculiarities of specific missile systems, missile support equipment ...

9. Establish and maintain customer liaison in all commands

where ... systems are deployed in order to provide timely receipt of logistics readiness information ... solve readiness problems on-site where possible ...

10. Perform visits to using units ... in order to recognize and solve problems.

11. Receive and manage the Missile System Equipment Report (2406) and monitor the DARCOM 139 Report in order to evaluate operational readiness ...

12. Establish and maintain an Assist and Instruct Team available to be dispatched anywhere in the world to provide overall readiness assistance ...

13. Assure maintenance of readiness posture during the phase-out of missile systems from the Army inventory.

14. Develop, prepare and/or review technical standards, policies, and procedures for packaging, shipping, storage, and care and preservation of MICOM mission items.

15. Coordinate rebuild planning actions ...

16. Determine, direct and control ... the distribution of assigned materiel.

17. Make recommendations for changes/deletions to MTOE's and TDA.

18. Control and expedite materiel movement ...

19. Review requirements against outstanding procurement, evaluate item demand history, and recommend appropriate changes ...

Annex C   Selected TRADOC Mission and Function Statements

DCS, Combat Operations:

1. ... point of contact between DARCOM and TRADOC for matters involving ... the Logistic Assistance Program.

2. ... doctrine, tactics, techniques, materiel and organizational requirements for the following areas ... supply, transportation, maintenance ... service support function of ... ordnance ... logistics, base development, ground mobility ...

3. ... management of concepts, doctrine and materiel pertaining to personnel and logistics systems (below wholesale level) for the Army.

4. ... supply support to include: supply support below the wholesale level, materiel management, requirements determination, procurement, distribution, storage, inventory management, disposal, supply operations and managerial information systems.

5. ... guidance and assistance to TRADOC subordinate commands ... for development of Draft Plan TOE for combat support units including Maintenance, Supply, Transportation ... Ordnance ... Service Support.

6. Develops Plan TOE for combat service support units for submission to DA for approval.

7. ... recommends changes to combat service support TOE.

DCS, Operations, Readiness and Intelligence:

Monitors readiness condition ... status of FORSCOM STRAF/REFORGER units on TRADOC installations.

DCS, Logistics:

1. Analyzes materiel and unit readiness reports and initiates appropriate action to achieve desired materiel readiness posture.

2. ... liaison with DA, FORSCOM, DARCOM, DSA and GSA to coordinate, expedite, and facilitate maintenance matters.

Annex D   Selected LOGCEN Mission and Function Statements

Concepts and Doctrine Directorate:

1. Develops concepts and doctrine for the Army in the field
   and installation logistics ... insure proper interface
   with wholesale logistics ... develop combat service sup-
   port units and organizations ...

2. Conducts selected studies of functionally oriented log-
   istics problem areas.

3. Participates in evaluation and field testing of new or
   improved doctrine ...

4. Maintains continuous liaison with Army in the field,
   CONUS installations, and reserve component logistic units
   in order to identify logistic problem areas.

5. Develops requirements for logistic doctrinal literature
   ... approves logistics doctrinal literature prepared by
   the Center's associated service schools ...

6. Develops proposed combat service support units/organiza-
   tions ...

7. Conducts periodic "User Logistics Conferences" ... to
   assure Army-wide understanding and acceptance of current
   and developing logistic doctrine.

Materiel Directorate:

1. Monitor selected materiel during the operational portion
   of the life cycle through available reports ... to iden-
   tify requirements for new materiel and/or improve exist-
   ing equipment.

2. Conducts limited inhouse repair parts analysis and ini-
   tiates/manages contracts for repair parts studies conduct-
   ed by outside agencies/activities.

3. Coordinate actions having significant or direct impact on
   repair parts support to the Army.

4. Develops plans to improve repair parts support to the
   peacetime Army ...

System Design Directorate:

.. Insures interface among the segments of the Army logistic
   (information) system, ie., the user, intermediate, whole-

Annex D, LOGCEN continued.

sale and national levels.

Operations Analysis Directorate:

1. Provides a technical research and evaluation capability in support of DA DCSLOG, and TRADOC/LOGC logistic activities (thru OR/Systems/Cost Analysis) ...

2. Serves as the focal point and provides the single organization responsible for managing the development, consolidation and dissemination of logistics planning factors for the Army.

3. Manages and operates the LOGC Logistics Data Base ... provides assistance to agencies outside the Center by retrieving logistics data from the Center's automated data base.

Organization Directorate:

1. ... plans and coordinates development of personnel requirements for new or revised logistic organizations ... as well as logistic TOE's; Manpower Authorization Criteria, Military Occupational Specialties, and Qualitative and Quantitative Personnel Requirements Information.

2. Develops new and revised TOE for which the Center is assigned proponency.

3. Reviews, analyzes, coordinates and processes TOE for compatibility with established doctrine, materiel and systems ...

4. Develops organizational doctrine and provides assistance ... on new or revised concepts and doctrine, materiel and systems as they pertain to ... personnel and equipment requirements for new or revised logistic organizations.

5. ... recommends to TRADOC changes to TOE.

6. ... assist other ... commands and agencies to insure that new and revised TOE and TDA provide adequate logistic support.

7. Analyses published TAADS data for Army-wide logistic trends that may be applicable.

Annex D, LOGCEN continued.

Training and Education Directorate:

1. Evaluates logistic training ... monitors logistic training/education ... insuring current logistic doctrine is incorporated ... developing and improving career management systems and/or programs for professional military and civilian logistic personnel.

2. Develops those aspects of the Integrated Logistic Support Concept that have training implications.

3. Assists in the determination of logistic training requirements, recommends minimum levels of logistic instruction for professional development ...

Logistics Training Board:

1. Reviews and analyzes training in logistic units ... with the goal of improving logistic unit readiness.

2. Monitors the development by logistic schools of instructional materiel tailored to provide training assistance to logistics units ...

3. Sponsors and monitors research, studies, and tests designed to promote improved training in logistics units.

Annex E   Selected USAMMCS Mission and Function Statements

1. Present resident and nonresident training and instruction.

2. Develop, coordinate, prepare and review studies, tests, and documents relative to organization, personnel and equipment.

3. Prepare, revise and coordinate military occupational specialties (MOS) ...

4. Develop branch doctrine and participate in combat development activities (combat service support doctrine for missiles and munitions) ...

5. Develops TOE documents and changes to existing proponent TOE. Reviews and/or develops input to non-proponent TOE within MMCS area of interest.

6. Performs job/mission analysis of proponent MOS/units.

7. Monitors and evaluates missile, munitions and weapon support system development to determine impact on future ... training.

8. Develops School position relative to training capacity for ... White Book Conferences.

9. Evaluates requirement for establishing, revising or discontinuing resident courses ...

10. Identifies feedback requirements, collects and analyzes data in area of responsibility.

Annex F   Selected DA DCSPER Mission and Function Statements

1. Manpower allocation (approving qualitative aspects – grade – branch – MOS for manpower authorizations ...).

2. Operational Readiness (Personnel aspects).

3. Military Personnel Management (White Book projections against projected enlisted skill assets and requirements).

4. Personnel Training (coordinating DA support and input to schools ...)

Annex G   Selected MILPERCEN Mission and Function Statements

1. Maintains liaison with representatives of Army staff agencies, CONUS and Oversea Commands concerning enlisted personnel training matters.

2. Programs, allocates quotas, and controls input to enlisted MOS training ...

3. Coordinates with DA staff, TRADOC, Army and other service schools ... in scheduling, adjusting training capacities, and revising programmed inputs.

4. Accomplishes training diversions and redistribution of enlisted personnel to meet changes in training requirements ...

5. Computes enlisted MOS training requirements for the Active Army (White Book function) ...

6. Determines and prepares the Army's list of critical military skills.

7. Reviews Army-wide status of all enlisted MOS, recommends and coordinates action to maintain optimum balance between MOS strengths and authorizations.

8. Conducts enlisted grade structure, job progression ... analysis.

9. Incorporates requirements for modification ... of training programs into the review process ... for equipment improvement programs.

10. Plans and coordinates distribution of enlisted personnel.

11. Evaluates impact of proposed and revised MOS on manning documents.

12. MOS analysis and development ...

13. Consultant in areas of occupational structuring, job evaluation and occupational analysis.

14. Develops recommendation to alter MOS structure ... and training ..., monitors the implementation of resultant actions.

15. Establishes and maintains the military personnel strength monitor chain from installation to HQDA.

Annex H   Selected DA DCSOPS Mission and Function Statements

1. Determines unit capability to perform designated missions
    based upon the status of personnel, logistics and training.

2. Assists in development of force requirements for combat
    support and service support forces.

3. Develop new or revised TOE, supervise development of TOE,
    and approve TOE for adoption ...

4. Office of record for all official TOE and Requirements
    Documentation.

5. Reviews Product Improvement Programs ...

6. Analysis and validation of unit total and detailed active
    Army authorizations in UIC, MOS, grade, and branch detail.

Annex I   Selected DA DCSLOG Mission and Function Statements

Directorate of Materiel Readiness:

1. Principle DCSLOG point of contact for management of unit logistic readiness of active Army and Reserve Components.

2. Conducts Command Logistics Review Team Expanded (CLRTX) visits to active Army units.

3. Supervises, controls and tasks the Logistics Evaluation Agency (LEA).

Directorate of Logistic Plans, Operations and Systems:

1. ... participates in formulation and development of logistics concepts and doctrines.

2. Establishes DCSLOG position regarding TOE's, exercises command control responsibilities regarding equipment allowances.

3. Determines the proper quality and mix of logistic support units in the force structure.

Directorate of Supply and Maintenance:

1. Evaluates results of policy application as it applies to all levels of maintenance.

2. Insures maintenance interests are adequately considered after materiel has been fielded and that proper resources are applied to sustain operations.

3. Develop policies and procedures governing the Army Maintenance Management System (TAMMS).

4. Develops and presents the DCSLOG position on maintenance aspects of concepts and doctrine studies for the Army in the field.

5. Establishes policy pertaining to programming and execution of DS/GS and depot maintenance of Army materiel.

6. Evaluates and initiates action to adjust logistic system and/or materiel systems to improve logistic supportability.

Annex J   Selected LEA Mission and Function Statements

1. Assist the DA DCSLOG in review and validation of logistic analysis ...

2. Evaluate supply, maintenance, transportation and service related logistics development ...

3. Analyze current functional logistics system to determine requirements for and recommend changes ...

4. Analyze for the DCSLOG proposed Army logistic doctrine, organization and systems for the near-term, mid-range, and long-term planning periods.

5. Participate in DA Logistics Readiness Assistance Visits ...

6. Determine ... the adequacy of existing functional logistics policy and systems application.

7. Perform, evaluate, and analyze logistic readiness and information reports to determine effectiveness of ... readiness and management information reporting systems and procedures.

8. Perform analytical review of Army logistics systems ...

9. Assist DCSLOG in maintaining surveillance over the logistic organization and system Army-wide to assure logistic readiness.

10. Control supply, maintenance, transportation, and services interface characteristics among the three primary levels of the Army logistic system, ie: DSU/user, Intermediate, and DA/wholesale systems.

Annex K   Selected FORSCOM Mission and Function Statements

<u>DCSLOG</u>:

1. Manages the Army Logistics Performance Measurement and Evaluation System for FORSCOM.

2. Receives and analyzes Unit Readiness Reports.

3. Initiates corrective actions to resolve readiness problems.

4. Participates in Command Logistics Review Team Visits.

5. Reviews TDA, TOE and MTOE for adequacy of equipment.

6. Provides staff supervision, operating procedures ... technical assistance within FORSCOM ...

<u>DCSOPS</u>:

1. Conducts readiness conferences to focus on readiness problems ...

2. Analyzes all readiness data to determine trends and short-falls ... forwards results of analysis to appropriate staff agencies for action.